

Dual-Loop Bus-Based Network Switch Using Distance-Value or Bit-Mask

Abstract of Disclosure

A network switch routes switch packets among nodes with input and output ports. The nodes are connected together in a loop by two buses. One bus sends packets in a clockwise direction around the loop of nodes, while the other bus sends packets in a counter-clockwise direction around the loop. Each bus is divided into links between adjacent nodes, which examine and forward the packets to the next node in the loop. A packet is duplicated and injected onto both buses from a source node, reaching half of the nodes in one direction, and the other nodes in the opposite direction. A distance value in the packet header is set to half of the number of nodes so that the packet is removed after traveling half-way around the loop. A bit-mask in the header indicates nodes to receive the packet, or source-monitoring can remove packets half-way around the loop.

The following table shows the results of the analysis of variance for the effect of the type of soil on the yield of the different varieties of wheat. The data are presented in the form of a table with the following columns: Variety, Soil, and Yield.